

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
M & G Polymers USA, LLC
Apple Grove
R30-05300054-2011

John A. Benedict
Director

Issued: DRAFT/PROPOSED • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]

Permit Number: **R30-05300054-2011**
Permittee: **M & G Polymers USA, LLC**
Facility Name: **Apple Grove**
Permittee Mailing Address: **State Route 2, Apple Grove, WV 25502**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Apple Grove, Mason County, West Virginia
Facility Mailing Address:	State Route 2, Apple Grove, WV 25502
Telephone Number:	(304) 576-2041
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of polyester resin
SIC Codes:	2821
UTM Coordinates:	397.86 km Easting • 4,279.97 km Northing • Zone 17

Permit Writer: Carrie McCumbers

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
CP3					
3P-3130	C4S-M-3130 Baghouse	C4S-F-3010	CP3 Recycle Surge Bin	1,170 ft ³	1994
3P-3190	None	C3L-F-3190	CP3 DEG Charge Tank	275 Gallons	1994
3P-155	None	D-155	CP3/CP4 MACT Tank	10,000 Gallons	2001
3P-1070	None	C3L-F-1070	CP3 Recupic EG Tank	12,700 Gallons	1994
3P-1071	None	C3L-F-1071	CP3 Recupic EG Tank	12,700 Gallons	1994
3P-1072	None	C3L-F-1072	CP3 Recupic EG Tank	12,700 Gallons	1994
3P-1032	None	C3L-F-3180	CP3 R/1 Recupic EG Charge Tank	1,730 Gallons	1994
		C3L-F-3140	CP3 R/1 EG Charge Tank	1,730 Gallons	1994
		C3L-F-3150	CP3 R/2 EG Charge Tank	275 Gallons	1994
3P-7020	C3L-F-7020 Seal Pot	C3L-F-6010	CP3 Catalyst Mix Tank	455 ft ³	2001
		C3L-F-6510	CP3 Catalyst Mix Tank	455 ft ³	2009
		C3L-F-7010	CP3/CP4 Catalyst Feed Tank	455 ft ³	2001
		C3L-F-8010	CP3/CP4 Toner Make-Up Tank	277 ft ³	2001
		C3L-F-9010	CP3/CP4 Toner Charge Tank	277 ft ³	2001
3P-2570	None	C3L-F-2570	CP3 Catalyst Slurry Tank	516 Gallons	1994
3P-2580	None	C3L-F-2580	CP3 Catalyst Slurry Tank	516 Gallons	1994
3P-8	None	UTG-F-3020	CP3 EG Storage Tank	675,000 Gallons	1966
3P-9	None	UTG-F-3010	CP3 EG Storage Tank	675,000 Gallons	1966
3P-1120	None	C3L-F-1120	CP3/CP4 Recupic EG Dump Tank	5,000 Gallons	1994
3P-1210	None	C38-E-1210	CP3 Pellet Dryers	12,500 pph	1994
3P-3210	None	C38-E-3210	CP3 Pellet Dryers	12,500 pph	1994
3P-5210	None	C38-E-5210	CP3 Pellet Dryers	12,500 pph	1994
3P-7210	None	C38-E-7210	CP3 Pellet Dryers	12,500 pph	2007
3P-0200	L4A-M-0200 Baghouse	L4A-F-0200	CP3 Off Spec Silo	8' x 32' s/s	1994
3P-0650	None	C3T-F-0650	CP3 Condensate Holding Tank	58 ft ³	1994
3P-1730	None	C3U-F-1730	CP3 R/3 TEG Bath	8" x 30" t/t	1994
3P-1900	None	C3T-F-1900	CP3 Refrigerant Surge Tank	955 Gallons	1994
3P-4620	None	C3T-F-4620	CP3 Condensed Dowtherm Receiver	116 Gallons	1994
3P-1101	C3S-M-1101 Baghouse	C3S-F-1101	Silo	8,000 ft ³	1993

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
3P-1601	C3S-M-1601 Baghouse	C3S-F-1601	Silo	3,500 ft³	1988
3EC-15	L21-M-1050 Baghouse	L21-F-1020	Silo	4,000 ft³	1976
3P-1510	L22-M-2120 Baghouse	L22-F-2040	Silo	4,000 ft³	1976
3P-5010	C3S-M-5010 Baghouse	C3S-F-5010	Master Recycle Silo	4,000 ft³	1974/ 2010
3P-7260	None	C3T-F-7260	CP3 Hot Oil Storage Tank	17,700 Gallons	1994
3P-1600	C3T-B-1600 Hot Oil Heater	C3L-F-2220	CP3 Colorant Make-Up Tank	400 Gallons	1994
		C3L-F-2201	CP3 Colorant Charge Tank	400 Gallons	1994
		C3L-F-3160	CP3 Stabilizer Charge Tank	275 Gallons	1994
		C3L-F-4211	CP3/CP4 Stabilizer Make-Up Tank	400 Gallons	1994
		C3L-F-4100	CP3/CP4 Stabilizer Surge Tank	516 Gallons	1994
		C3L-F-4210	CP3/CP4 Stabilizer Make-Up Tank	400 Gallons	1994
		C3L-F-5040	CP3/CP4 Stabilizer Make-Up Tank	486 Gallons	1994
		C3H-F-3010	CP3 Slurry Mix Tank	607 ft³	2001
		C3H-F-4010	CP3 Slurry Feed Tank	1,319 ft³	2001
		C31-E-1020	CP3 R/1 System	2,970 Gallons	1994
		C32-E-1050	CP3 R/2 System	2,970 Gallons	1994
		C33-F-2250	CP3 R/3 System	2,517 Gallons	1994
		C33-F-5010	CP3 R/3 Bis System	2,970 Gallons	2001
		C34-F-3280	CP3 R/4A System	1,700 pph	1994
		C31-F-1220	CP3 R/1 & R/2 Condensate Tank	7,383 pph	1994
		C33-F-2260	CP3 R/3 Condensate Tank	679 gpm	1994
		C34-F-2290	CP3 R/4A Condensate Tank	459 gpm	1994
		C34-F-8290	CP3 R/4B Condensate Tank	744 gpm	2007
		C34-F-9280	CP3 R/4B System	7,502 pph	2007
		C3T-F-0600	Knock Out Pot	N/A	1994
		C3H-F-4020	Seal Pot	5.6 pph	1994
CP4					
4P-1020	C4S-M-1040 Baghouse	C4S-F-1020	CP4 TPA Surge Silo	178 ft³	1996
4P-2100	C4S-M-2100 Baghouse	C4S-F-2050	CP4 IPA Surge Silo	8' x 18' t/s	1996
4P-3130	C4S-M-3140 Baghouse	C4S-F-3080	CP4 Recycle Surge Bin	1,170 ft³	1999
4P-3190	None	C4L-F-3190	CP4 DEG Charge Tank	275 Gallons	1996
4P-1070	None	C4L-A-1070	CP4 Recupic EG Tank	12,700 Gallons	1996
4P-1071	None	C4L-A-1071	CP4 Recupic EG Tank	12,700 Gallons	1996
4P-1072	None	C4L-A-1072	CP4 Recupic EG Tank	12,700 Gallons	1996
4P-1800	None	C4L-F-1800	CP4 EG Storage Tank	675,000 Gallons	1996

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
4P-0430	None	C4L-F-0430	CP4 EG Feed Tank	275 Gallons	1996
4P-1032	None	C4L-F-3140	CP4 R/1 EG Charge Tank	1,742 Gallons	1996
		C4L-F-3180	CP4 R/1 Recupic EG Charge Tank	1,742 Gallons	1996
4P-1900	None	C4R-F-1900	CP4 Refrigerant Surge Tank	955 Gallons	1996
4P-4620	None	C4T-F-4620	CP4 Condensed Dowtherm Receiver	125 Gallons	1996
4P-1210	None	C48-E-1210	CP4 Pellet Dryers	13,000 pph	1996
4P-3210	None	C48-E-3210	CP4 Pellet Dryers	13,000 pph	1996
4P-5210	None	C48-E-5210	CP4 Pellet Dryers	13,000 pph	1996
4P-0340	C4A-M-0340 Baghouse	C4A-F-0410	CP4/CSS-12/CSS-13 Crystallizer Blending Silo	3,500 ft ³	1994
4P-0200	L4B-M-0200 Baghouse	L4B-F-0200	CP4 Off Spec Silo	8' x 32' s/s	1996
4P-4120	None	L24-M-4120	CP4 Pellet Filter Receiver	318 ft ²	1993
4P-1730	None	C4U-F-1710	CP4 R/4 TEG Bath	32" x 60" t/t	1996
4P-1296	None	C4Q-A-1296	CP4 Extruder	4,760 pph	2004
4P-4220	C4Q-M-4140/ C4Q-M-4220 Baghouses	C4Q-F-1290	CP4 Feed Hopper System	0.75 m ³	2004
4P-4180	C4Q-M-4190 Baghouse	C4Q-F-2290	CP4 Feed Hopper System	0.75 m ³	2004
4P-4160	C4Q-M-4160 Baghouse	C4Q-F-3290	CP4 Feed Hopper System	0.75 m ³	2004
4P-1600	C4T-B-1600 Hot Oil Heater	C4L-F-3160	CP4 Stabilizer Charge Tank	275 Gallons	1996
		C4L-F-2120	CP4 Catalyst Charge Tank	275 Gallons	1996
		C4L-F-3170	CP4 Catalyst Charge Tank	830 Gallons	1996
		C41-E-3020	CP4 R/1 System	2,970 Gallons	1996
		C42-E-2050	CP4 R/2 System	2,970 Gallons	1996
		C43-E-3250	CP4 R/3 System	2,970 Gallons	1996
		C44-E-3280	CP4 R/4 System	26,000 Gallons	1996
		C41-F-3220	CP4 R/1 & R/2 Separator	90 Gallons	1996
		C43-F-2260	CP4 R/3 Condensate Tank	1,660 Gallons	1996
		C44-F-2290	CP4 R/4 Condensate Tank	1,660 Gallons	1996
		C4L-F-2200	Catalyst Make-Up Tank	400 Gallons	1994
		C4L-F-5980	Make-Up Tank	533 Gallons	1994
		C4T-F-2670	Dowtherm Lights Tank	6,000 Gallons	1988
		C4Q-A-1297	CP4 Extruder	2,800 pph	2007
P-7640	None	F-7640	CP4 Hot Oil Storage Tank	16,725 Gallons	1996
4P-2002	C4Q-M-2002 Baghouse	C4Q-F-5000	CP4 Feed Hopper System	0.75 m ³	2007
4P-0001	C4Q-M-0001/ C4Q-F-0001 Baghouses	C4Q-F-5010	CP4 Feed Bin	530 ft ³	2007
NA	None	C4Q-F-5330	CP4 Box/Bag Loader	NA	2007

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
CSS-7					
7P-2601	C2A-M-2601 Baghouse	C2A-F-5410	CSS-7 Crystallizer Surge Bin	3,500 ft ³	1988
7P-2609	C2A-M-5350 Baghouse	C2A-E-5240/ C2A-B-5010	CSS-7 Crystallizer and Heater	9,000 pph/ 1.4 MMBTU/hr	1988
		C2B-B-7020/ C2B-E-5250	CSS-7 Preheater and Heater	9,000 pph/ 1.48 MMBTU/hr	1988
7P-0520	C2D-M-0520 Baghouse	C2D-E-5280	CSS-7 Product Cooler	14,156 acfm	1988
7P-0607	L36-M-0607 Baghouse	L36-F-6040	CSS-7 Box & Bagging Blender	85 ft ²	1988
7EC-15	L21-M-1050 Baghouse	L21-F-1020	CSS-7 Off-Spec Silo A	4,000 ft ³	1988
7P-1510	L22-M-2120 Baghouse	L22-F-2040	CSS-7 Off-Spec Silo B	85 ft ²	1987
7P-4227A	L14-M-4070 Baghouse	L14-F-4070	CSS-7 Product Storage Silo	4,000 ft ³	1987
7P-4227B	L14-M-4080 Baghouse	L14-F-4080	CSS-7 Product Storage Silo	4,000 ft ³	1987
7P-0430	None	L14-U-4030	CSS-7 Fines Elutriator	150 ft ²	1990
7P-2660	None	L14-F-2660	CSS-7/CSS-8 T-66 Dump Tank	116 Gallons	1994
7P-9002	None	L14-F-9001	CSS-7/CSS-8 Hot Oil Storage Tank	17,700 Gallons	1988
2P-9001	M-2603 Baghouse C2T-B-9001 Hot Oil Heater	C2B-F-5420	CSS-7 Preheater Surge Bin	943 ft ³	1988
		C2B-M-5040	CSS-7 Surge Bin Filter	1,200 acfm	1988
		C2C-R-5060	CSS-7 R/6 Reactor	1,958 ft ³	1988
CSS-8					
8E-02	S8A-M-2390 Baghouse	S8A-F-2430	CSS-8 Crystallizer Surge Bin	1,244 ft ³	1991
8E-03	S8A-M-3350 Baghouse	S8A-E-3240/ S8A-B-3010	CSS-8 Crystallizer and Heater	68.4 ft ² / 2.15 MMBtu/hr	1991
8E-04	S8B-M-2420 Baghouse	S8B-E-2250/ S8B-B-2020	CSS-8 Preheater and Heater	27.7 ft ² / 0.98 MMBtu/hr	1991
8E-05	S8D-M-1520 Baghouse	S8D-E-1280	CSS-8 Product Cooler	18,000 pph	1991
8E-06	S8A-M-1590 Baghouse	S8A-M-1610	CSS-8 Refeed Cyclone	1,000 ft ³	1991
		S8E-F-1440	CSS-8 Verification Bin	18,000 pph	1991
None	None	S8E-F-1450	CSS-8 Product Dense Phase Tank	50 ft ³	1988
8E-08	L37-M-7130 Baghouse	L37-F-7050	CSS-8 Boxing Silo	1,200 ft ³	1991
8E-09	None	L37-P-7130	CSS-8 Storage Air Classifier	55 lb/ft ³	1991
		L37-M-7150	CSS-8 Fines Elutriator	700 acfm	1991
8E-12	None	L13-M-3020	CSS-8 Pellet Filter Receiver	25,500 acfm	1991
8EP-204A	L12-M-2030 Baghouse	L12-F-2030	CSS-8 Product Silo	85ft ²	1987

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
8EP-204B	L12-M-2040 Baghouse	L12-F-2040	CSS-8 Product Silo	85 ft ²	1987
8P-4127A	L13-M-3050 Baghouse	L13-F-3050	CSS-8 Product Silo	4,000ft ³	1987
8P-4127B	L13-M-3060 Baghouse	L13-F-3060	CSS-8 Product Silo	4,000 ft ³	1987
8ECS4	L11-M-1010 Baghouse	L11-F-1010	CSS-8/CSS-9 Salvage Silo	4,000 ft ³	1977
8ECS5	L11-M-1020 Baghouse	L11-F-1020	CSS-8 Salvage Silo	4,000 ft ³	1977
8P-1030	None	L11-U-1030	CSS-8 Fines Elutriator	150 ft ²	1991
8P-1050	None	L13-U-3030	CSS-8 Fines Elutriator	150 ft ²	1991
8EP-208	None	L12-M-4030	CSS-8 Fines Elutriator	150 ft ²	1991
7P-2660	N/A	L14-F-2660	T-66 Dump Tank	116 Gallons	1988
7P-9002	N/A	L14-F-9001	Hot Oil Storage	17,700 Gallons	1991
2P-9001	C2T-B-9001 Hot Oil Heater	S8A-E-1420	CSS-8 Preheater Surge Bin	930 ft ³	1991
		S8C-R-1060/ S8C-R-3070	CSS-8 Reactor	2,404 ft ³	1991
		C2T-F-2670	T-66 Lites Tank	6,400 Gallons	1994
		C2T-F-5660	Knockout Drum	55 Gallons	1994
		F-5001	T-66 Tank	NA	1976
CSS-9					
9P-1701A	L15-M-1701A Baghouse	L15-F-1701A	CSS-9 Verification Bin	920 ft ³	1988
9P-1701B	L15-M-1701B Baghouse	L15-F-1701B	CSS-9 Verification Bin	920 ft ³	1988
9P-5091	None	L15-U-5090	CSS-9 Fines Elutriator	150 ft ²	1991
9P-2701A	L15-M-2701A Baghouse	L15-F-2701A	CSS-9 Product Silo	4,000 ft ³	1988
9P-2701B	L15-M-2701B Baghouse	L15-F-2701B	CSS-9 Product Silo	4,000 ft ³	1988
9P-6110	None	L15-U-6110	CSS-9 Fines Elutriator	150 ft ²	1991
9E-10	L17-M-7230 Baghouse	L17-F-7130	CSS-9 Product Silo	4,000 ft ³	1991
		L17-F-7140	CSS-9 Product Silo	4,000 ft ³	1991
9E-11	None	L17-M-7240	CSS-9 Fines Elutriator	700 acfm	1991
9ECS5	L15-M-1020 Baghouse	L15-F-1020	CSS-9 Salvage Silo	4,000 ft ³	1977
9P-1030	None	L15-U-1030	CSS-9 Fines Elutriator	150 ft ²	1991

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
CSS-10					
10P-1340	C3A-M-1340 Baghouse	C3A-F-1410	CSS-10 Crystallizer Blending Silo	3,500 ft ³	1994
10P-2390	C3A-M-2390 Baghouse	C3A-F-2460	CSS-10 Crystallizer Surge Bin	1,570 ft ³	1994
10P-3350	C3A-M-3350 Baghouse	C3A-E-3240	CSS-10 Crystallizer and Heater	93.5 ft ² / 3.04 MMBTU/hr	1994
10P-1130	L1A-M-1130 Baghouse	L1A-F-1090	CSS-10 Product Silo	4,000 ft ³	1994
		L1A-F-1100	CSS-10 Product Silo	4,000 ft ³	1994
10P-0520	C3D-M-0520 Baghouse	C3D-E-1280	CSS-10 Product Cooler	9,000 pph	1994
		C3D-E-5280	CSS-11 Product Cooler	27.7 ft ²	1994
10P-2420	C3B-M-2420 Baghouse	C3B-E-2250	CSS-10 Preheater and Heater	27.7 ft ² / 0.977 MMBTU/hr	1994
10P-1590	C3E-M-1590 Baghouse	C3E-F-1440	CSS-10 Verification Bin	1,450 ft ³	1994
10P-1050	L3A-M-1050 Baghouse	L3A-F-1030	CSS-10/CSS-11 Box & Bagging Blender	1,200 ft ³	1994
10P-1100	None	L3A-M-1070	CSS-10 Fines Elutriator	150 ft ²	1994
10P-1140	None	L1A-M-1140	CSS-10 Fines Elutriator	150 ft ²	1994
3P-1600	C3B-M-1430 Baghouse C3T-B-1600 Hot Oil Heater	C3B-F-1420	CSS-10 Preheater Surge Bin	785 ft ³	1994
	C3T-B-1600 Hot Oil Heater	C3C-R-1060	CSS-10 R/6 Reactors & Heater	2,404 ft ³	1994
CSS-11					
11P-6340	C3A-M-6340 Baghouse	C3A-F-5410	CSS-11 Crystallizer Blending Silo	3,500 ft ³	1994
11P-6390	C3A-M-6390 Baghouse	C3A-F-5460	CSS-11 Crystallizer Surge Bin	1,244 ft ³	1994
11P-7350	C3A-M-7350 Baghouse	C3A-E-7240	CSS-11 Crystallizer and Heater	93.5 ft ² / 3 MMBTU/hr	1994
11P-6420	C3B-M-6420 Baghouse	C3B-E-6250	CSS-11 Preheater and Heater	27.7 ft ² / 0.977 MMBTU/hr	1994
11P-5590	C3E-M-5590 Baghouse	C3E-F-5440	CSS-11 Verification Bin	1,450 ft ³	1994
11P-1090	L3B-M-2060 Baghouse	L3B-F-2040	CSS-11 Box and Bagging Blender	1,200 ft ³	1994
11P-1080	None	L3B-M-2080	CSS-11 Fines Elutriator	150 ft ²	1994
11P-1160	L1B-M-1160 Baghouse	L1B-F-2115	CSS-11 Product Silo	4,000 ft ³	1994
		L1B-F-2160	CSS-11 Product Silo	4,000 ft ³	1994
11P-2170	None	L1B-M-2170	CSS-11 Fines Elutriator	150 ft ²	1994

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
3P-1600	C3B-M-5430 Baghouse C3T-B-1600 Hot Oil Heater	C3B-F-5420	CSS-11 Preheater Surge Bin	785 ft ³	1994
	C3T-B-1600 Hot Oil Heater	C3C-R-5060	CSS-11 R/6 Reactors & Heater	2,404 ft ³	1994
CSS-12					
12P-2390	C4A-M-2390 Baghouse	C4A-F-2460	CSS-12 Crystallizer Surge Bin	1,570 ft ³	1996
12P-3350	C4A-M-3350 Baghouse	C4A-E-3240	CSS-12 Crystallizer & Heater	93.5 ft ² / 3.04 MMBTU/hr	1996
12P-2420	C4B-M-2420 Baghouse	C4B-E-2250	CSS-12 Preheater and Heater	43 ft ² / 0.97 MMBTU/hr	1996
12P-0520	C4D-M-0520 Baghouse	C4D-E-1280	CSS-12 Product Cooler	42.6 ft ²	1996
		C4D-E-5280	CSS-13 Product Cooler	42.6 ft ²	1996
12P-1590	C4E-M-1590 Baghouse	C4E-F-1440	CSS-12 Verification Bin	1,450 ft ³	1996
12P-1130	L1C-M-1130 Baghouse	L1C-F-1090	CSS-12 Product Silo	4,000 ft ³	1996
		L1C-F-1110	CSS-12 Product Silo	4,000 ft ³	1996
12P-1140	None	L1C-M-1140	CSS-12 Fines Elutriator	150 ft ²	1996
12P-0390	L4C-M-0390 Baghouse	L4C-F-0210	CSS-12/CSS-13 Salvage Silo	1,500 ft ²	1996
12P-2060	L3B-M-2060 Baghouse	L3B-F-2040	CSS-12/CSS-13 Boxing & Bagging Blender	1,200 ft ²	1996
12P-2080	None	L3B-M-2080	CSS-12 Fines Elutriator	150 ft ²	1996
4P-1600	C4B-M-1430 Baghouse	C4B-F-1420	CSS-12 Preheater Surge Bin	785 ft ²	1996
	C4T-B-1600 Hot Oil Heater	C4C-R-3070	CSS-12 Reactor	2,110 ft ³	1996
	C4T-B-1600 Hot Oil Heater	C4C-R-1060 C4C-E-2320	CSS-12 Reactor & Reheater	1,958 ft ³	1996
CSS-13					
13P-6390	C4A-M-6390 Baghouse	C4A-F-6460	CSS-13 Crystallizer Surge Bin	1,570 ft ³	1996
13P-7350	C4A-M-7350 Baghouse	C4A-E-7240	CSS-13 Crystallizer & Heater	93.5 ft ² / 3 MMBTU/hr	1996
12P-6420	C4B-M-6420 Baghouse	C4B-E-6250	CSS-13 Preheater & Heater	43 ft ² / 0.97 MMBTU/hr	1996
13P-5590	C4E-M-5590 Baghouse	C4E-F-5440	CSS-13 Verification Bin	1,450 ft ³	1996
13P-2080	None	C4E-M-2080	CSS-13 Fines Elutriator	150 ft ²	1996

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
13P-1130	L1C-M-1130 Baghouse	L1D-F-1110	CSS-13 Product Storage	4,000 ft ³	1996
		L1D-F-1120	CSS-13 Product Storage	4,000 ft ³	1996
13P-1170	None	L1D-M-1130	CSS-13 Fines Elutriator	150 ft ²	1996
4P-1600	C4B-M-5430 Baghouse C4T-B-1600 Hot Oil Heater	C4B-F-5420	CSS-13 Preheater Surge Bin	1,390 ft ³	1996
		E-7070	CSS-13 Reactor	2,110 ft ³	1996
	C4T-B-1600 Hot Oil Heater	C4C-R-5060 C4C-E-6320	CSS-13 Reactor & Reheater	1,958 ft ³	1996
Hot Oil Heaters					
3P-1600	None	C3T-B-1600	Hot Oil Heater	53.1 MMBtu/hr	1994
4P-1600	None	C4T-B-1600	Hot Oil Heater	53.1 MMBtu/hr	1996
2P-9001	None	C2T-B-9001	Hot Oil Heater	24 MMBtu/hr	1988
3P-1700	None	C3T-F-1700	Hot Oil Heater	23.0 MMBtu/hr	2007
Boilers and Heaters					
U-B-2010	None	UGS-B-2010	WWTP Portable Boiler	14.2 MMBtu/hr	2010
U-B-3010	None	UGS-B-3010	Front Office Hot Water Boiler	0.9 MMBtu/hr	2009
U-B-3011	None	UGS-B-3011	Front Office Hot Water Boiler	0.9 MMBtu/hr	2009
U-B-4010	None	UGS-B-4010	CP-2 Ops Center Hot Water Boiler	1.6 MMBtu/hr	2009
U-B-4011	None	UGS-B-4011	CP-2 Ops Center Hot Water Boiler	1.6 MMBtu/hr	2009
U-B-1050	None	UGS-B-1050	D-155 Space Heater	0.26 MMBtu/hr	2009
U-B-1060	None	UGS-B-1060	D-155 Space Heater	0.26 MMBtu/hr	2009
U-B-1004	None	UGS-B-1004	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-1005	None	UGS-B-1005	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-1006	None	UGS-B-1006	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-1007	None	UGS-B-1007	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-4001	None	UGS-B-4001	CP-2 A/C Room Space Heater	0.26 MMBtu/hr	2009
U-B-4002	None	UGS-B-4002	CP-2 A/C Room Space Heater	0.26 MMBtu/hr	2009
U-B-4003	None	UGS-B-4003	Utility Space Heater	0.26 MMBtu/hr	2009
U-B-4004	None	UGS-B-4004	Utility Space Heater	0.26 MMBtu/hr	2009
Warehouse					
WF-6010	MWB-F-1080 Baghouse	L26-F-6010	Warehouse – West Silo	750 ft ³	1959
D56	None	MW11717	Warehouse Railcar Unloading System	NA	1976
Generators					
P-66	None	P-66	Diesel Generator	235 hp	1959
U3F-G-171	None	U3F-G-171	Diesel Generator	235 hp	1993

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1650O	February 15, 2011

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance
CEM	Continuous Emission Monitor		Standards
CES	Certified Emission Statement	PM	Particulate Matter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than
CO	Carbon Monoxide		10µm in diameter
C.S.R. or CSR	Codes of State Rules	pph	Pounds per Hour
DAQ	Division of Air Quality	ppm	Parts per Million
DEP	Department of Environmental Protection	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	SIP	State Implementation Plan
lbs/hr or lb/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
m	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
		TSP	Total Suspended Particulate
mm	Million	USEPA	United States Environmental Protection Agency
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour	UTM	Universal Transverse Mercator
NA or N/A	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.

[45CSR§13-10.5.]

- 3.1.10.a. The natural gas-fired process heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700], shall comply with all applicable requirements for existing affected sources pursuant to 40 C.F.R. 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source effective date. The permittee is required to submit an Initial Notification no later than 120 calendar days after becoming subject to the rule in accordance with 40 C.F.R. §63.7545(b).

These dates may be subject to change if the permittee is granted an extension pursuant to the provisions of 40 C.F.R. 63, the compliance date is amended by USEPA, or if §112(j) of the 1990 Clean Air Act Amendments becomes applicable .

[40 C.F.R. 63, Subpart DDDDD; 45CSR34]

- 3.1.10.b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 C.F.R. 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 C.F.R. §63.7545(e) .

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR§30-6.5.b]

- 3.1.10.c. Upon the effective date of 40 C.F.R. 63, Subpart DDDDD, §63.56 "requirements for case-by-case determination of equivalent emission limitations after promulgation of subsequent MACT standard" shall apply to the transition from 112(g) to MACT conditions for Boiler UGS-B-2010. **[40 C.F.R. 63, Subpart B; 45CSR34]**

- 3.1.11. When emissions on an annual basis of one or more of the greenhouse gases listed below are greater than the *de minimis* amounts listed below, all greenhouse gases emitted above the *de minimis* amounts shall be reported to the Secretary under 45CSR§42-4. (see Section 3.5.):

Greenhouse Gas Compound	tons/year
carbon dioxide	10,000
methane	476
nitrous oxide	32.6
hydrofluorocarbons	0.855
perfluorocarbons	1.09
sulfur hexafluoride	0.42

[45CSR§42-3.1., State-Enforceable only.]

3.2. Monitoring Requirements

3.2.1. None.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.
2. The result of the test for each permit or rule condition.
3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-1650, 4.4.1]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.5.10. **Greenhouse Gas Reporting Requirements.** When applicable, as determined in permit section 3.1., greenhouse gas emissions shall be reported pursuant to 45CSR§42-4. including the following:

- a. In accordance with a reporting cycle provided by the Secretary, affected sources shall report to the Secretary the quantity of all greenhouse gases emitted above *de minimis* amounts in the years specified by the Secretary.

[45CSR§42-4.1., State-Enforceable only.]

- b. Affected sources shall only be required to report annual quantities of anthropogenic non-mobile source greenhouse gases emitted at the stationary source, and shall not be required to report biogenic emissions of greenhouse gases.

[45CSR§42-4.2., State-Enforceable only.]

- c. Reports of greenhouse gas emissions submitted to the Secretary under 45CSR§42-4. shall be signed by a responsible official and shall include the following certification statement: “I, the undersigned, hereby certify that the data transmitted to the West Virginia Department of Environmental Protection is true, accurate, and complete, based upon information and belief formed after reasonable inquiry.

[45CSR§42-4.5., State-Enforceable only.]

3.6. Compliance Plan

- 3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 C.F.R. 60, Subpart D – “Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971.” This subpart applies to each steam generating unit that commences construction or modification after August 17, 1971 and has a heat input capacity of more than 250 MMBtu/hr. M & G Polymers does not have any steam generating units with a heat input capacity of more than 250 MMBtu/hr.
- b. 40 C.F.R. 60, Subpart Db – “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.” This subpart applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984 and has a heat input capacity of greater than 100 MMBtu/hr. M & G Polymers does not have any steam generating units with a heat input capacity of more than 100 MMBtu/hr.
- c. 40 C.F.R. 60, Subpart E – “Standards of Performance for Incinerators.” This subpart applies to each incinerator of more than 50 tons per day charging rate. An incinerator is defined by 40 C.F.R. §60.51 as any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter. The Apple Grove Plant does not operate a solid waste incinerator as defined by this rule.

- d. 40 C.F.R. 60, Subpart K - “Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.” There are no petroleum liquid storage tanks at the Apple Grove Plant with a storage capacity greater than 151,412 liters (40,000 gallons), constructed, reconstructed, or modified after June 11, 1973 and prior to May 19, 1978.
- e. 40 C.F.R. 60, Subpart Ka - “Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.” There are no petroleum liquid storage tanks at the Apple Grove Plant with a storage capacity greater than 151,416 liters (40,000 gallons) for which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984.
- f. 40 C.F.R. 60, Subpart Kb - “Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.” 40 C.F.R. 60, Subpart Kb applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (19,813 gallons) that is used to store volatile organic liquids (VOC) for which construction, reconstruction, or modification is commenced after July 23, 1984. Based on the applicability criteria of 40 C.F.R. §60.110b(a), only the CP4 EG Storage Tank (C4L-F-1800) is subject to the requirements of this subpart. In accordance with 40 C.F.R. §60.110b(b), the subpart does not apply to storage vessels with a capacity greater than or equal to 151 cubic meters (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kPa. Since the CP4 EG Storage Tank (C4L-F-1800) has a capacity of 675,000 gallons and a maximum true vapor pressure of less than 1 kPa, it is exempt from the requirements of 40 C.F.R. 60, Subpart Kb. The permittee is, however, required to maintain readily accessible records for the life of the source showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel in accordance with 40 C.F.R. §§60.116b(a) and (b).
- g. 40 C.F.R. 60, Subpart O – “Standards of Performance for Sewage Treatment Plants.” The Apple Grove Plant does not operate an incineration unit or boiler to burn sludge from a municipal sewage treatment plant.
- h. 40 C.F.R. 60 Subpart VV - “Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.” The Apple Grove Plant does not produce as intermediates or final products any of the materials listed in 40 C.F.R. §60.489.
- i. 40 C.F.R. 60 Subpart DDD - “Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.” Since M &G Polymers is subject to the requirements of 40 C.F.R. 63, Subpart JJJ, they are no longer subject to the requirements of 40 C.F.R. 60, Subpart DDD as specified in 40 C.F.R. §§63.1311(i)(1) and 63.1316(b).
- j. 40 C.F.R. 60, Subpart III – “Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes. The Apple Grove Plant does not produce any of the chemicals listed in 40 C.F.R. §60.617 as a product, co-product, by-product, or intermediate.
- k. 40 C.F.R. 60 Subpart NNN - “Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.” The Apple Grove Plant does not have a process unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product, or intermediate.

- l. 40 C.F.R. 60 Subpart RRR - “Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.” The Apple Grove Plant does not have a process unit that produces any of the chemicals listed in 40 C.F.R. §60.707 as a product, co-product, by-product, or intermediate.
- m. 40 C.F.R. 63, Subpart G – “National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. 40 C.F.R. 63, Subparts F, G, and H do not apply to manufacturing process units that do not meet the criteria in 40 C.F.R. §§ 63.100 (b) (1), (b) (2), and (b) (3). The Apple Grove Plant does not meet the applicability criteria and is only subject to the requirements of 40 C.F.R. 63, Subpart G as they apply under 40 C.F.R. 63, Subpart JJJ.
- n. 40 C.F.R. 63, Subpart I – National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks. The Apple Grove Plant is subject to the requirements of 40 C.F.R. 63, Subpart JJJ. 40 C.F.R. §63.1311(g)(1) states that after the compliance dates specified in 40 C.F.R. 63, Subpart JJJ, an affected source also subject to 40 C.F.R. 63, Subpart I is required to comply only with the provisions of Subpart JJJ and is no longer subject to Subpart I.
- o. 40 C.F.R. 63, Subpart EEEE – “National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline). Table 1 constituents present are acetaldehyde, 1,4-dioxane, and ethylene glycol. Acetaldehyde and 1,4-dioxane are present only in impurity quantities in recupic. Those vessels containing recupic are already subject to 40 C.F.R. 63, Subpart JJJ, and according to 40 C.F.R. §63.2338(c)(1) are not subject to 40 C.F.R. 63, Subpart EEEE. Those sources containing ethylene glycol are not subject to 40 C.F.R. 63, Subpart EEEE because ethylene glycol has an annual average true vapor of less than 0.7 kilopascals (0.1 psia) and is therefore not defined as an organic liquid under 40 C.F.R. §63.2406.

4.0 Source-Specific Requirements

4.1. Limitations and Standards

- 4.1.1. The facility shall be limited to the maximum production rates for each of the associated operating units as shown in the following table:

Table 4.1.1.

Unit	Production Rate	
	Hourly ¹ (pounds/hour)	Annual (tons/year)
CP-3	70,000	306,600
CP-4	40,000	157,680
CSS-7	13,000	56,940
CSS-8	18,000	78,840
CSS-9	42,000	183,960
CSS-10	18,000	78,840
CSS-11	18,000	78,840
CSS-12	18,000	78,840
CSS-13	18,000	78,840

¹Hourly production limits are based on a maximum daily average rate.

[45CSR13, R13-1650, 4.1.1]

- 4.1.2. The Hot Oil Heater [C2T-B-9001] shall be operated in accordance to the following limits and requirements:
- The heater shall be limited to a maximum designed heat input rate of 24.0×10^6 Btu/hour.
 - Fuel consumption shall be limited to natural gas at a maximum rate of 55,312 ft³/hour and 278×10^6 ft³/year.
 - The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOCs from sources vented to emission point 2P-9001, as established in Section 1.1 – Emission Units, of this permit.
 - Visible emissions from Emission Point 2P-9001 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.2; 45CSR§2-3.1]

- 4.1.3. The Hot Oil Heater [C3T-B-1600] shall be operated in accordance to the following limits and requirements:
- The heater shall be limited to a maximum designed heat input rate of 53.1×10^6 Btu/hour.
 - Fuel consumption shall be limited to natural gas at a maximum rate of 55,312 ft³/hour and 411×10^6 ft³/year.

- c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOCs from sources vented to emission point 3P-1600, as established in Section 1.1 – Emission Units, of this permit.
- d. Visible emissions from Emission Point 3P-1600 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.3; 45CSR§2-3.1]

- 4.1.4. The Hot Oil Heater [C4T-B-1600] shall be operated in accordance to the following limits and requirements:
 - a. The heater shall be limited to a maximum designed heat input rate of 53.1×10^6 Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of 55,312 ft³/hour and 411×10^6 ft³/year.
 - c. The heater shall be designed and operated so to provide a minimum destruction efficiency of 99.8% for VOCs from sources vented to emission point 4P-1600, as established in Section 1.1 – Emission Units, of this permit.
 - d. Visible emissions from Emission Point 4P-1600 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.4; 45CSR§2-3.1]

- 4.1.5. The Hot Oil Heater [C3T-F-1700] shall be operated in accordance to the following limits and requirements:
 - a. The heater shall be limited to a maximum designed heat input rate of 23.0×10^6 Btu/hour.
 - b. Fuel consumption shall be limited to natural gas at a maximum rate of 24,000 ft³/hour and 210×10^6 ft³/year.
 - c. Visible emissions from Emission Point 3P-1700 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.5; 45CSR§2-3.1]

- 4.1.6. Carbon Monoxide (CO) emissions from the Hot Oil Heater [C3T-F-1700] shall be limited to no more than 400 ppm by volume on a dry basis corrected to 3 percent oxygen based on an average calculated from three (3) separate test runs, each test run lasting at least 1 hour. **[45CSR13, R13-1650, 4.1.6]**
- 4.1.7. The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) for the Hot Oil Heater [C3T-F-1700] according to the provisions in 40 C.F.R. §63.6(e)(3). **[45CSR13, R13-1650, 4.1.7; 45CSR34; 40 C.F.R. §63.6(e)(3)]**
- 4.1.8. The permittee shall develop a site-specific testing plan according to the requirements in 40 C.F.R. §63.7(c). **[45CSR13, R13-1650, 4.1.8; 45CSR34; 40 C.F.R. §63.7(c)]**

- 4.1.9. The Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011] and Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004] shall be operated in accordance to the following limits and requirements:
- The boilers and heaters shall be limited to the maximum designed heat input rates defined in the Emission Units Table in Section 1.1 of this permit.
 - Fuel consumption shall be limited to natural gas. **[45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010]**
 - Visible emissions from Emission Points U-B-2010, U-B-3010, U-B-3011, U-B-4010, U-B-4011, U-B-1050, U-B-1060, U-B-1004, U-B-1005, U-B-1006, U-B-1007, U-B-4001, U-B-4002, U-B-4003, and U-B-4004 shall not exceed a maximum of 10% opacity on a 6-minute averaging period except as authorized per 45CSR§2-3.1.

[45CSR13, R13-1650, 4.1.9; 45CSR§2-3.1]

- 4.1.10. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. (3P-3130, 3P-0200, 3P-1101, 3P-1601, 3P-1510, 3EC-15, 3P-5010, 4P-1020, 4P-2100, 4P-3130, 4P-0340, 4P-0200, 4P-4120, 4P-4220, 4P-4180, 4P-4160, 4P-2002, 4P-0001, 7P-2601, 7P-2609, 7P-0520, 7P-0607, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 7P-0430, 8E-02, 8E-03, 8E-04, 8E-05, 8E-06, 8E-08, 8E-09, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8ECS5, 8E-12, 8P-1030, 8P-1050, 8EP-208, 9P-1701A, 9P-1701B, 9P-5091, 9P-2701A, 9P-2701B, 9P-6110, 9E-10, 9E-11, 9ECS5, 9P-1030, 10P-1340, 10P-2390, 10P-3350, 10P-2420, 10P-0520, 10P-1590, 10P-1050, 10P-1100, 10P-1130, 10P-1140, 11P-6340, 11P-6390, 11P-7350, 11P-6420, 11P-5590, 11P-1090, 11P-1080, 11P-1160, 11P-2170, 12P-2390, 12P-3350, 12P-2420, 12P-0520, 12P-1590, 12P-1130, 12P-1140, 12P-0390, 12P-2060, 12P-2080, 13P-6390, 13P-7350, 12P-6420, 13P-5590, 13P-2080, 13P-1130, 13P-1170, and WF-6010) **[45CSR13, R13-1650, 4.1.10 and 4.1.13; 45CSR§7-3.1]**
- 4.1.11. Emissions released from sources affected by this permit shall be limited to emission points, pollutants, and associated emission rates as established by Tables 4.1.11.a through 4.1.11.j.

Table 4.1.11.a. – CP3 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
3P-3130	C4S-M-3130 Baghouse	C4S-F-3010	Particulate Matter	0.13	0.19
3P-3190	None	C3L-F-3190	Total VOC	0.01	0.01
3P-155	None	D-155	Ethylene Glycol	0.01	0.01
			Acetaldehyde	0.01	0.01
			Total VOC	0.01	0.01
3P-1070	None	C3L-F-1070	Ethylene Glycol	0.01	0.02
			Total VOC	0.01	0.02
3P-1071	None	C3L-F-1071	Ethylene Glycol	0.01	0.02
			Total VOC	0.01	0.02
3P-1072	None	C3L-F-1072	Ethylene Glycol	0.01	0.02
			Total VOC	0.01	0.02

Table 4.1.11.a. – CP3 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
3P-1032	None	C3L-F-3180	Ethylene Glycol Total VOC	0.23 0.52	0.23 0.52
		C3L-F-3140			
		C3L-F-3150			
3P-7020	C3L-F-7020	C3L-F-6010	Ethylene Glycol Total VOC	0.71 0.71	0.49 0.49
		C3L-F-7010			
		C3L-F-6510			
3P-2570	None	C3L-F-2570	Ethylene Glycol Total VOC	0.03 0.01	0.03 0.01
3P-2580	None	C3L-F-2580	Ethylene Glycol Total VOC	0.03 0.01	0.03 0.01
3P-8	None	UTG-F-3020	Ethylene Glycol Total VOC	0.02 0.02	0.09 0.09
3P-9	None	UTG-F-3010	Ethylene Glycol Total VOC	0.02 0.02	0.09 0.09
3P-1120	None	C3L-F-1120	Ethylene Glycol Total VOC	0.01 0.01	0.02 0.02
3P-1210	None	C38-E-1210	Ethylene Glycol	0.19	0.77
			Acetaldehyde	0.06	0.22
			Total VOC	0.37	1.48
3P-3210	None	C38-E-3210	Ethylene Glycol	0.19	0.77
			Acetaldehyde	0.06	0.22
			Total VOC	0.37	1.48
3P-5210	None	C38-E-5210	Ethylene Glycol	0.19	0.77
			Acetaldehyde	0.06	0.22
			Total VOC	0.37	1.48
3P-7210	None	C38-E-7210	Ethylene Glycol	0.19	0.77
			Acetaldehyde	0.06	0.22
			Total VOC	0.37	1.48
3P-0200	L4A-M-0200 Baghouse	L4A-F-0200	Particulate Matter	0.35	0.01
3P-0650	None	C3T-F-0650	Ethylene Glycol	0.01	0.01
			Total VOC	0.01	0.01
3P-1730	None	C3U-F-1730	Total VOC	0.02	0.01
3P-1900	None	C3T-F-1900	Total VOC	0.01	0.01
3P-4620	None	C3T-F-4620	Total VOC	0.01	0.01
3P-7260	None	C3T-F-7260	Total VOC	0.01	0.01

Table 4.1.11.a. – CP3 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
3P-1600	C3T-B-1600 Hot Oil Heater	C3T-B-1600			
		C3H-F-3010			
		C3H-F-4010			
		C31-E-1020			
		C32-E-1050			
		C33-E-2250			
		C33-E-5010	Ethylene Glycol	0.01	0.02
		C34-F-3280	Acetaldehyde	1.04	1.50
		C34-F-8290	1,4-Dioxane	0.01	0.01
		C34-F-9280	Total VOC	1.32	2.77
		C31-F-1220	Particulate Matter	0.11	0.47
		C33-F-2260	Carbon Monoxide	1.86	8.14
		C34-F-2290	NO _x	3.19	14.00
		C3H-F-3010	SO _x	0.05	0.23
		C3H-F-4010			
		C3H-F-4020			
		C3B-F-1420			
		C3B-F-5420			
		C3H-F-4020			
3P-1700	None	C3T-F-1700	Total VOC	0.12	0.50
			Particulate Matter	0.17	0.76
			Carbon Monoxide	1.89	8.26
			NO _x	2.25	9.87
			SO _x	0.01	0.06
3P-1101	C3S-M-1101	C3S-F-1101	Particulate Matter	0.04	0.18
3P-1601	C3S-M-1601	C3S-F-1601	Particulate Matter	0.04	0.18
3P-1510	L22-M-2120	L22-F-2040	Particulate Matter	0.04	0.18
3EC-15	L21-M-1050	L21-F-1020	Particulate Matter	0.04	0.18
3P-5010	C3S-M-5010	C3S-F-5010	Particulate Matter	0.04	0.18

Table 4.1.11.b. – CP4 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
4P-1020	C4S-M-1040 Baghouse	C4S-F-1020	Particulate Matter	0.11	0.46
4P-2100	C4S-M-2100 Baghouse	C4S-F-2050	Particulate Matter	0.01	0.01
4P-3130	C4S-M-3140 Baghouse	C4S-F-3080	Particulate Matter	0.11	0.23

Table 4.1.11.b. – CP4 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
4P-3190	None	C4L-F-3190	Total VOC	0.01	0.01
4P-1070	None	C4L-A-1070	Ethylene Glycol	0.03	0.10
			Total VOC	0.03	0.10
4P-1071	None	C4L-A-1071	Ethylene Glycol	0.03	0.10
			Total VOC	0.03	0.10
4P-1072	None	C4L-A-1072	Ethylene Glycol	0.03	0.10
			Total VOC	0.03	0.10
4P-1800	None	C4L-F-1800	Ethylene Glycol	0.01	0.04
			Total VOC	0.01	0.04
4P-1032	None	C4L-F-3140	Ethylene Glycol	0.09	0.42
		C4L-F-3180	Total VOC	0.09	0.42
4P-1900	None	C4R-F-1900	Ethylene Glycol	0.01	0.01
			Total VOC	0.01	0.01
4P-4620	None	C4T-F-4620	Total VOC	0.01	0.01
4P-1210	None	C48-E-1210	Ethylene Glycol	0.07	0.29
			Acetaldehyde	0.02	0.09
			Total VOC	0.13	0.57
4P-3210	None	C48-E-3210	Ethylene Glycol	0.07	0.29
			Acetaldehyde	0.02	0.09
			Total VOC	0.13	0.57
4P-5210	None	C48-E-5210	Ethylene Glycol	0.07	0.29
			Acetaldehyde	0.02	0.09
			Total VOC	0.13	0.57
4P-0340	C4A-M-0340 Baghouse	C4A-F-0410	Particulate Matter	0.03	0.01
4P-0200	L4B-M-0200 Baghouse	L4B-F-0200	Particulate Matter	0.11	0.01
4P-4120	None	L24-M-4120	Particulate Matter	0.01	0.02
4P-1730	None	C4U-F-1710	Total VOC	0.01	0.01
4P-4220	C4Q-M-4140/ C4Q-M-4220 Baghouses	C4Q-F-1290	Particulate Matter	0.006	0.03
4P-4180	C4Q-M-4190 Baghouse	C4Q-F-2290	Particulate Matter	0.006	0.03
4P-4160	C4Q-M-4160 Baghouse	C4Q-F-3290	Particulate Matter	0.006	0.03
P-7640	None	F-7640	Total VOC	0.01	0.01

Table 4.1.11.b. – CP4 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
4P-1600	C4T-B-1600 Hot Oil Heater	C4L-F-3160	Particulate Matter Carbon Monoxide NO _x SO ₂ Total VOC Ethylene Glycol Acetaldehyde	0.11 1.90 3.2 0.06 0.34 0.01 0.05	0.47 8.14 14.0 0.23 1.44 0.02 0.19
		C4L-F-2120			
		C4L-F-3170			
		C41-E-3020			
		C42-E-2050			
		C43-E-3250			
		C44-E-3280			
		C41-F-3220			
		C43-F-2260			
		C44-F-2290			
		C4L-F-2200			
		C4L-F-5980			
		C4Q-A-1297			
		C4B-F-1420			
		C4C-R-3070			
		C4C-R-1060			
		C4C-E-2320			
		C4B-F-5420			
		E-7070			
		C4C-R-5060			
		C4C-E-6320			
4P-1600	C4T-B-1600 Hot Oil Heater	C4T-F-2670*	Total VOC	0.01	0.01
			Total HAPs**	0.01	0.01
			Benzene	0.01	0.01
4P-2002	C4Q-M-2002	C4Q-F-5000	Particulate Matter	0.04	0.08
4P-0001	C4Q-M-0001/ C4Q-0001	C4Q-F-5010	Particulate Matter	0.01	0.01
3P-7020	C3L-F-7020	C3L-F-6010	Ethylene Glycol	0.39	0.27
		C3L-F-7010	Total VOC	0.39	0.27

* Emissions become effective at start-up of the system on DOWTHERM® RP heat transfer fluid

** Total HAPs include: Benzene, Toluene, Ethyl Benzene, and Naphthalene

Table 4.1.11.c. – CSS-7 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
7P-2601	C2A-M-2601 Baghouse	C2A-F-5410	Particulate Matter	0.01	0.01
7P-2609	C2A-M-5350 Baghouse	C2A-E-5240/	Particulate Matter	0.01	0.04
		C2A-B-5010	Carbon Monoxide	0.05	0.18
		C2B-B-7020/ C2B-E-5250	NO _x	0.23	0.91
			SO ₂	0.01	0.01
			Total VOC	0.42	1.80
			Ethylene Glycol	0.26	1.10
7P-0520	C2D-M-0520 Baghouse	C2D-E-5280	Acetaldehyde	0.13	0.54
			Particulate Matter	0.03	0.09
			Total VOC	0.14	0.57
			Ethylene Glycol	0.12	0.46
7P-0607	L36-M-0607 Baghouse	L36-F-6040	Acetaldehyde	0.01	0.02
7P-0607	L36-M-0607 Baghouse	L36-F-6040	Particulate Matter	0.01	0.01
7EC-15	L21-M-1050 Baghouse	L21-F-1020	Particulate Matter	0.01	0.01
7P-1510	L22-M-2120 Baghouse	L22-F-2040	Particulate Matter	0.01	0.01
7P-4227A	L14-M-4070 Baghouse	L14-F-4070	Particulate Matter	0.01	0.01
7P-4227B	L14-M-4080 Baghouse	L14-F-4080	Particulate Matter	0.01	0.01
7P-4030	None	L14-U-4030	Particulate Matter	0.01	0.01
7P-2660	None	L14-F-2660	Total VOC	0.01	0.01
7P-9002	None	L14-F-9001	Total VOC	0.01	0.01
2P-9001	M-2603 Baghouse C2T-B-9001 Hot Oil Heater	C2B-F-5420	PM	0.04	0.16
			CO	0.91	3.6
		C2B-M-5040	NO _x	1.7	6.7
			SO ₂	0.05	0.2
			VOC	0.09	0.38
			Total HAPs	0.07	0.27
		C2C-R-5060	Ethylene Glycol	0.04	0.16
			Acetaldehyde	0.03	0.11

Table 4.1.11.d. – CSS-8 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
8E-02	S8A-M-2390 Baghouse	S8A-F-2430	Particulate Matter	0.01	0.01
8E-03	S8A-M-3350 Baghouse	S8A-E-3240/ S8A-B-3010	Particulate Matter	0.07	0.31
			Ethylene Glycol	0.04	0.16
			Carbon Monoxide	0.05	0.19
			NO _x	0.22	0.90
			SO ₂	0.01	0.01
			Total VOC	0.09	0.38
8E-04	S8B-M-2420 Baghouse	S8B-E-2250/ S8B-B-2020	Particulate Matter	0.04	0.18
			Ethylene Glycol	0.03	0.12
			Acetaldehyde	0.04	0.19
			Carbon Monoxide	0.02	0.09
			NO _x	0.10	0.40
			SO ₂	0.01	0.01
			Total VOC	0.08	0.35
8E-05	S8D-M-1520 Baghouse	S8D-E-1280	Particulate Matter	0.02	0.08
8E-06	S8A-M-1590 Baghouse	S8A-M-1610 S8E-F-1440	Particulate Matter	0.01	0.01
8E-08	L37-M-7130 Baghouse	L37-F-7050	Particulate Matter	0.01	0.01
8E-09	None	L37-M-7150	Particulate Matter	0.01	0.02
8EP-204A	L12-M-2030 Baghouse	L12-F-2030	Particulate Matter	0.01	0.01
8EP-204B	L12-M-2040 Baghouse	L12-F-2040	Particulate Matter	0.01	0.01
8P-4127A	L13-M-3050 Baghouse	L13-F-3050	Particulate Matter	0.01	0.01
8P-4127B	L13-M-3060 Baghouse	L13-F-3060	Particulate Matter	0.01	0.01
8ECS4	L11-M-1010 Baghouse	L11-F-1010	Particulate Matter	0.01	0.06
8ECS5	L11-M-1020 Baghouse	L11-F-1020	Particulate Matter	0.01	0.06
8E-12	None	L13-M-3020	Particulate Matter	0.06	0.06
8P-1030	None	L11-U-1030	Particulate Matter	0.01	0.05
8P-1050	None	L13-U-3030	Particulate Matter	0.01	0.05
8EP-208	None	L12-M-4030	Particulate Matter	0.01	0.02
7P-2660	None	L14-F-2660	Total VOCs	0.01	0.01
7P-9002	None	L14-F-9001	Total VOCs	0.01	0.01

Table 4.1.11.d. – CSS-8 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
2P-9001	C2T-B-9001	S8A-E-1420	Particulate Matter	0.04	0.16
		S8C-R-1060 / S8C-R-3070	Ethylene Glycol	0.05	0.19
			Acetaldehyde	0.04	0.13
		C2T-F-2670	Total VOC	0.11	3.60
		T-66	Carbon Monoxide	0.91	6.70
			NO _x	1.70	0.20
		C2T-B-9001	SO ₂	0.05	0.46

Table 4.1.11.e. – CSS-9 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
9P-1701A	L15-M-1701A Baghouse	L15-F-1701A	Particulate Matter	0.01	0.01
9P-1701B	L15-M-1701B Baghouse	L15-F-1701B	Particulate Matter	0.01	0.01
9P-5091	None	L15-U-5090	Particulate Matter	0.01	0.02
9P-2701A	L15-M-2701A Baghouse	L15-F-2701A	Particulate Matter	0.01	0.01
9P-2701B	L15-M-2701B Baghouse	L15-F-2701B	Particulate Matter	0.01	0.01
9P-6110	None	L15-U-6110	Particulate Matter	0.01	0.02
9E-10	L17-M-7230 Baghouse	L17-F-7130	Particulate Matter	0.01	0.04
		L17-F-7140			
9E-11	None	L17-M-7240	Particulate Matter	0.01	0.03
9ECS5	L15-M-1020 Baghouse	L15-F-1020	Particulate Matter	0.02	0.08
9P-1030	None	L15-U-1030	Particulate Matter	0.01	0.06
8ECS4	M-1010	F-1010	Particulate Matter	0.02	0.08

Table 4.1.11.f. – CSS-10 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
10P-1340	C3A-M-1340 Baghouse	C3A-F-1410	Particulate Matter	0.01	0.01
10P-2390	C3A-M-2390 Baghouse	C3A-F-2460	Particulate Matter	0.01	0.01
10P-3350	C3A-M-3350 Baghouse	C3A-E-3240	Particulate Matter	0.04	0.04
			Carbon Monoxide	0.13	0.13
			NO _x	0.65	0.65
			SO ₂	0.01	0.01
			Total VOC	1.53	1.53
			Ethylene Glycol	0.30	1.25
			Acetaldehyde	0.06	0.23
10P-2420	C3B-M-2420 Baghouse	C3B-E-2250	Particulate Matter	0.01	0.04
			Carbon Monoxide	0.02	0.06
			NO _x	0.07	0.28
			SO ₂	0.01	0.01
			Total VOC	0.24	1.00
			Ethylene Glycol	0.08	0.34
			Acetaldehyde	0.13	0.53
10P-0520	C3D-M-0520 Baghouse	C3D-E-1280	Particulate Matter	0.02	0.06
		C3D-E-5280	Total VOC	0.19	0.80
			Ethylene Glycol	0.15	0.62
			Acetaldehyde	0.01	0.02
10P-1590	C3E-M-1590 Baghouse	C3E-F-1440	Particulate Matter	0.01	0.01
10P-1050	L3A-M-1050 Baghouse	L3A-F-1030	Particulate Matter	0.01	0.01
10P-1100	None	L3A-M-1070	Particulate Matter	0.01	0.01
10P-1130	L1A-M-1130 Baghouse	L1A-F-1090	Particulate Matter	0.01	0.01
		L1A-F-1100			
10P-1140	None	L1A-M-1140	Particulate Matter	0.01	0.01

Table 4.1.11.g. – CSS-11 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
11P-6340	C3A-M-6340 Baghouse	C3A-F-5410	Particulate Matter	0.01	0.01
11P-6390	C3A-M-6390 Baghouse	C3A-F-5460	Particulate Matter	0.01	0.01
11P-7350	C3A-M-7350 Baghouse	C3A-E-7240	Particulate Matter	0.07	0.03
			Carbon Monoxide	0.03	0.13
			NO _x	0.15	0.65
			SO ₂	0.01	0.01
			Total VOC	0.37	1.53
			Ethylene Glycol	0.30	1.25
			Acetaldehyde	0.06	0.23
11P-6420	C3B-M-6420 Baghouse	C3B-E-6250	Particulate Matter	0.01	0.02
			Carbon Monoxide	0.02	0.06
			NO _x	0.07	0.28
			SO ₂	0.01	0.01
			Total VOC	0.24	1.01
			Ethylene Glycol	0.08	0.34
			Acetaldehyde	0.13	0.53
11P-5590	C3E-M-5590 Baghouse	C3E-F-5440	Particulate Matter	0.01	0.01
11P-1090	L3B-M-2060 Baghouse	L3B-F-2040	Particulate Matter	0.01	0.01
11P-1080	None	L3B-M-2080	Particulate Matter	0.01	0.01
11P-1160	L1B-M-1160 Baghouse	L1B-F-2115	Particulate Matter	0.01	0.01
		L1B-F-2160			
11P-2170	None	L1B-M-2170	Particulate Matter	0.01	0.01

Table 4.1.11.h. – CSS-12 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
12P-2390	C4A-M-2390 Baghouse	C4A-F-2460	Particulate Matter	0.01	0.01
12P-3350	C4A-M-3350 Baghouse	C4A-E-3240	Particulate Matter	0.01	0.04
			Carbon Monoxide	0.04	0.16
			NO _x	0.19	0.80
			SO ₂	0.01	0.01
			Total VOC	0.37	1.53
			Ethylene Glycol	0.30	1.25
			Aldehyde	0.06	0.23
12P-2420	C4B-M-2420 Baghouse	C4B-E-2250	Particulate Matter	0.01	0.02
			Carbon Monoxide	0.02	0.07
			NO _x	0.08	0.34
			SO ₂	0.01	0.01
			Total VOC	0.23	0.98
			Ethylene Glycol	0.08	0.30
			Aldehyde	0.13	0.54
12P-0520	C4D-M-0520 Baghouse	C4D-E-1280	Particulate Matter	0.03	0.11
		C4D-E-5280	Total VOC	0.20	0.84
			Ethylene Glycol	0.16	0.66
			Acetaldehyde	0.01	0.02
12P-1590	C4E-M-1590 Baghouse	C4E-F-1440	Particulate Matter	0.01	0.01
12P-1130	L1C-M-1130 Baghouse	L1C-F-1090	Particulate Matter	0.01	0.01
		L1C-F-1110			
12P-1140	None	L1C-M-1140	Particulate Matter	0.01	0.01
12P-0390	L4C-M-0390 Baghouse	L4C-F-0210	Particulate Matter	0.10	0.01
12P-2060	L3B-M-2060 Baghouse	L3B-F-2040	Particulate Matter	0.01	0.01
12P-2080	None	L3B-M-2080	Particulate Matter	0.01	0.01

Table 4.1.11.i. – CSS-13 Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions		
			Pollutants	Hourly (pounds/hour)	Annual (tons/year)
13P-6390	C4A-M-6390 Baghouse	C4A-F-6460	Particulate Matter	0.01	0.01
13P-7350	C4A-M-7350 Baghouse	C4A-E-7240	Particulate Matter	0.01	0.04
			Carbon Monoxide	0.04	0.16
			NO _x	0.19	0.80
			SO ₂	0.01	0.01
			Total VOC	0.37	1.53
			Ethylene Glycol	0.30	1.25
			Acetaldehyde	0.06	0.23
12P-6420	C4B-M-6420 Baghouse	C4B-E-6250	Particulate Matter	0.01	0.02
			Carbon Monoxide	0.02	0.07
			NO _x	0.08	0.34
			SO ₂	0.01	0.01
			Total VOC	0.23	0.98
			Ethylene Glycol	0.08	0.30
			Acetaldehyde	0.13	0.54
13P-5590	C4E-M-5590 Baghouse	C4E-F-5440	Particulate Matter	0.01	0.01
13P-2080	None	C4E-M-2080	Particulate Matter	0.01	0.01
13P-1130	L1C-M-1130 Baghouse	L1D-F-1110	Particulate Matter	0.01	0.01
		L1D-F-1120			
13P-1170	None	L1D-M-1130	Particulate Matter	0.01	0.01

Table 4.1.11.j. – Boilers and Heaters Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions									
			CO		NO _x		PM ₁₀		SO _x		VOC	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
U-B-2010	None	UGS-B-2010	1.17	3.43	1.40	4.08	0.11	0.31	0.01	0.03	0.08	0.23
U-B-3010	None	UGS-B-3010	0.08	0.33	0.09	0.39	0.01	0.03	0.01	0.01	0.01	0.02
U-B-3011	None	UGS-B-3011	0.08	0.33	0.09	0.39	0.01	0.03	0.01	0.01	0.01	0.02
U-B-4010	None	UGS-B-4010	0.13	0.58	0.16	0.69	0.12	0.06	0.01	0.01	0.01	0.04
U-B-4011	None	UGS-B-4011	0.13	0.58	0.16	0.69	0.12	0.06	0.01	0.01	0.01	0.04
U-B-1050	None	UGS-B-1050	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1060	None	UGS-B-1060	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1004	None	UGS-B-1004	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1005	None	UGS-B-1005	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1006	None	UGS-B-1006	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-1007	None	UGS-B-1007	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-4001	None	UGS-B-4001	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01

Table 4.1.11.j. – Boilers and Heaters Maximum Permitted Emissions

Emission Point ID	Control Device	Emission Unit ID	Emissions									
			CO		NO _x		PM ₁₀		SO _x		VOC	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
U-B-4002	None	UGS-B-4002	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-4003	None	UGS-B-4003	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01
U-B-4004	None	UGS-B-4004	0.01	0.05	0.03	0.11	0.01	0.01	0.01	0.01	0.01	0.01

Compliance with the hourly PM and SO₂ emission limits for 3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010, shall demonstrate compliance with the less stringent 45CSR§2-4.1.b hourly PM emission limits and the 45CSR§10-3.3.f hourly SO₂ emission limits. Compliance with the hourly PM emission limits for 3P-3130, 3P-0200, 3P-1101, 3P-1601, 3P-1510, 3EC-15, 3P-5010, 4P-1020, 4P-2100, 4P-3130, 4P-0340, 4P-0200, 4P-4120, 4P-4220, 4P-4180, 4P-4160, 4P-2002, 4P-0001, 7P-2601, 7P-2609, 7P-0520, 7P-0607, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 7P-4030, 8E-02, 8E-03, 8E-04, 8E-05, 8E-06, 8E-08, 8E-09, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8ECS5, 8E-12, 8P-1030, 8P-1050, 8EP-208, 9P-1701A, 9P-1701B, 9P-5091, 9P-2701A, 9P-2701B, 9P-6110, 9E-10, 9E-11, 9ECS5, 9P-1030, 10P-1340, 10P-2390, 10P-3350, 10P-2420, 10P-0520, 10P-1590, 10P-1050, 10P-1100, 10P-1130, 10P-1140, 11P-6340, 11P-6390, 11P-7350, 11P-6420, 11P-5590, 11P-1090, 11P-1080, 11P-1160, 11P-2170, 12P-2390, 12P-3350, 12P-2420, 12P-0520, 12P-1590, 12P-1130, 12P-1140, 12P-0390, 12P-2060, 12P-2080, 13P-6390, 13P-7350, 12P-6420, 13P-5590, 13P-2080, 13P-1130, and 13P-1170 shall demonstrate compliance with the less stringent 45CSR§7-4.1 PM emission limits. **[45CSR13, R13-1650, 4.1.11, 4.1.12, 4.1.13, 4.1.14, and APPENDIX A; 45CSR§2-4.1.b; 45CSR§7-4.1; 45CSR§10-3.3.f]**

- 4.1.12. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. Compliance with the opacity limits specified in 4.1.12 shall demonstrate compliance with similar opacity limits specified in Conditions 4.1.2.d, 4.1.3.d, 4.1.4.d, 4.1.5.c, and 4.1.9.c. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010) **[45CSR13, R13-1650, 4.1.12; 45CSR§2-3.1]**
- 4.1.13. Compliance with the visible emission requirements of 4.1.12 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 4.1.12. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubber systems for emission control. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010) **[45CSR13, R13-1650, 4.1.12; 45CSR§2-3.2]**
- 4.1.14. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010) **[45CSR§2-9.2]**

- 4.1.15. No person shall cause, suffer, allow or permit emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device. (*3P-0200, 3P-1101, 3P-1601, 3P-1510, 3EC-15, 3P-5010, 4P-1020, 4P-2100, 4P-0340, 4P-0200, 7EC-15, 7P-1510, 7P-4227A, 7P-4227B, 8E-08, 8EP-204A, 8EP-204B, 8P-4127A, 8P-4127B, 8ECS4, 8ECS5, 9P-2701A, 9P-2701B, 9E-10, 9ECS5, 10P-1340, 10P-1130, 11P-6340, 11P-1160, 12P-1130, 12P-0390, 13P-1130, and WF-6010*) **[45CSR13, R13-1650, 4.1.13; 45CSR§7-3.7]**
- 4.1.16. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable. **[45CSR13, R13-1650, 4.1.13; 45CSR§7-5.1]**
- 4.1.17. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. **[45CSR13, R13-1650, 4.1.13; 45CSR§7-5.2]**
- 4.1.18. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director **[45CSR13, R13-1650, 4.1.13; 45CSR§7-9.1]**
- 4.1.19. The pertinent emissions control provisions of 40 C.F.R. 63, Subpart JJJ – “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins” applicable to continuous process vents include the following:
- a. The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall limit organic HAP emissions from continuous process vents in the collection of raw material preparation sections (emission points C3L-F-3190, C3L-F-3140, C3L-F-3150, C3L-F-3160, C3L-F-4100, C3L-F-4211, C3L-F-4210, C3L-F-5040, C3L-F-6010, C3L-F-7010, C3L-F-2570, C3L-F-2580, C31-E-1020, C32-E-1050, C31-F-1220, C3L-F-0430, C4L-F-3190, C4L-F-3140, C4L-F-3160, C4L-F-2120, C4L-F-3170, C41-E-3020, C42-E-2050, C41-F-3220, and C4L-F-0430) within the affected source by complying with the following:

Organic HAP emissions from all continuous process vents associated with the esterification vessels in each individual raw materials preparation section shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents associated with the esterification vessels in the collection of raw material preparation sections within the affected source shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from all associated TPPU(s). Other continuous process vents (i.e., those not associated with the esterification vessels) in the collection of raw materials preparation sections within the affected source shall comply with 40 C.F.R. §63.1315.

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1316(b)(2)(i) and 63.1316(b)(2)(i)(A)]

- b. The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall limit organic HAP emissions from continuous process vents in the collection of polymerization reaction sections (emission points C3L-F-1070, C3L-F-1071, C3L-F-1072, C3L-F-3180, C33-F-2250, C33-F-5010, C34-F-3280, C33-F-2260, C34-F-2290, C4L-A-1070, C4L-A-1071, C4L-A-1072, C4L-F-3180, C43-E-3250, C44-E-3280, C43-F-2260, and C44-F-2290) within the affected source by complying with the following:

Organic HAP emissions from all continuous process vents in each individual polymerization reaction section (including emissions from any equipment used to further recover ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reactions sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from all associated TPPU(s).

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1316(b)(2)(ii) and 63.1316(b)(2)(ii)(A)]

- 4.1.20. The permittee shall comply with the requirements of 40 C.F.R. §§63.132 through 63.149 for wastewater, with the differences noted in 40 C.F.R. §§63.1330(b)(1) through (b)(22). The pertinent emission control provisions of 40 C.F.R. §§63.132 through 63.149 applicable to Group 1 wastewater streams include the following:
- a. For each wastewater tank that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall operate and maintain a fixed roof.
 - b. For each container that receives, manages, or treats a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the permittee shall comply with the requirements of 40 C.F.R. §§63.135(b) through (f).
 - c. The owner or operator shall achieve the required mass removal (RMR) of Table 9 compounds for a wastewater stream that is Group 1 for Table 9 compounds.

[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1330(b), 63.132(a)(2)(i), 63.133(a)(1), 63.135(a) through (f), and 63.138(f)]

- 4.1.21. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak standards include 40 C.F.R. §§63.162 (Standards: General.), 63.163 (Standards: Pumps in light liquid service.), 63.164 (Standards: Compressors.), 63.165 (Standards: Pressure relief devices in gas/vapor service.), 63.166 (Standards: Sampling connection system.), 63.167 (Standards: Open-ended valves or lines.), 63.168 (Standards: Valves in gas/vapor service and in light liquid service.), 63.169 (Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.), 63.170 (Standards: Surge control vessels and bottoms receivers.), 63.171 (Standards: Delay of repair.), 63.172 (Standards: Closed-vent systems and control devices.), 63.173 (Standards: Agitators in gas/vapor service and in light liquid service.), 63.174 (Standards: Connectors in gas/vapor service and in light liquid service.), 63.175 (Quality improvement program for valves.), and 63.176 (Quality improvement program for pumps.). **[45CSR13, R13-1650, 4.1.15; 45CSR34; 40 C.F.R. §§63.1331(a), 63.162, 63.163, 63.164, 63.165, 63.166, 63.167, 63.168, 63.169, 63.170, 63.171, 63.172, 63.173, 63.174, 63.175, and 63.176]**

4.1.22. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. **[45CSR13, R13-1650, 4.1.18; 45CSR§13-5.11]**

4.1.23. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified as follows:

Emission Point	45CSR7 Hourly Particulate Emission Limit pph
WF-6010	28

[45CSR§7-4.1.]

4.1.24. The permittee shall comply with the following requirements of 40 C.F.R. 63, Subpart ZZZZ – “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” for Generators P-66 and U3F-G-171 by no later than May 3, 2013.

- (a) If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in 40 C.F.R. 63, Subpart ZZZZ - Table 2c. For an emergency stationary CI RICE, the following apply:

For each...	You must meet the following requirement, except during periods of startup...	During periods of startup you must...
Emergency stationary CI RICE and black start stationary CI RICE. ¹	<p>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;²</p> <p>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;</p> <p>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary³</p>	Minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³

¹If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local laws has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required under the Federal, State, or local law under which the risk was deemed unacceptable.

²Sources have the option to utilize an oil analysis program (Condition 4.1.24(g)) as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

³Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

- (b) You must be in compliance with the emission limitations and operating limitations in 40 C.F.R. 63, Subpart ZZZZ that apply to you at all times.
- (c) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (d) For an existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- (e) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- (f) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 4.1.24(a) apply.
- (g) You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 4.1.24(a). The oil analysis must be performed at the same frequency specified for changing the oil in 4.1.24(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5 percent. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- (h) For an existing emergency and black start stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must demonstrate continuous compliance with each operating limitation in 4.1.24(a) according to the methods specified below:

For each...	Comply with the requirement to...	You must demonstrate continuous compliance by...
Existing emergency and black start stationary RICE \leq 500 HP located at a major source of HAP...	a. Work or Management practices	<p>i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or</p> <p>ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.</p>

- (i) You must report each instance in which you did not meet each operating limitation in 4.1.24(a). These instances are deviations from the operating limitations in 40 C.F.R. 63, Subpart ZZZZ. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650.

(j) *Requirements for emergency stationary RICE.*

- (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs 4.1.24(j)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 4.1.24(j)(1)(i) through (iii) of this section is prohibited. If you do not operate the engine according to the requirements in paragraphs 4.1.24(j)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

- (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
- (iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a

demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph 4.1.24(j)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

[45CSR34; 40 C.F.R. §§63.6595(a), 63.6602, 63.6605, 63.6625(e), 63.6625(e)(2), 63.6625(f), 63.6625(h), 63.6625(i), 63.6640(a), 63.6640(b), and 63.6640(f)(1); Tables 2c and 6 of 40 C.F.R. 63, Subpart ZZZZ]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the production limits set forth in Section 4.1.1 of this permit, the permitted facility shall monitor the daily average hourly and total annual production rates for each of the process units identified in Table 4.1.1 of this permit. **[45CSR13, R13-1650, 4.2.1]**
- 4.2.2. For the purpose of determining compliance with the operating limits set forth in Section 4.1.2., 4.1.3., 4.1.4., 4.1.5, and 4.1.9 of this permit, the permitted facility shall monitor the hourly and annual fuel consumption rates associated with the routine operation of the Hot Oil Heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700], the Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011], and the Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004]. **[45CSR13, R13-1650, 4.2.2; 45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010]**
- 4.2.3. For the purpose of determining compliance with the particulate emission limits set forth in sections 4.1.10 and 4.1.11 of this permit and the emission limits set forth in 4.1.23 for emission point WF-6010, the permitted facility shall monitor the pressure differential across each of the dust collectors identified in Section 1.0 of this permit during periods of routine operation.
- [45CSR13, R13-1650, 4.2.3; 45CSR§30-5.1.c]**
- 4.2.4. Continuous process vents using a control or recovery device to comply with 4.1.19 shall comply with all applicable monitoring provisions specified for continuous process vents in 40 C.F.R. §63.114 except for the differences noted in 40 C.F.R. §63.1315(a). The pertinent sections of 40 C.F.R. §63.114 applicable to continuous process vents include the following:
- a. For any bypass line between the origin of the gas stream and the point where the gas stream reaches the process vent that could divert the gas stream directly to the atmosphere, the owner or operator of a process vent shall properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 C.F.R. §63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere.

[45CSR13, R13-1650, 4.2.4; 45CSR34; 40 C.F.R. §§63.1317, 63.1315(a), 63.114(d) and (d)(1)]

- 4.2.5. To demonstrate compliance with the wastewater provisions of 4.1.20, the permittee shall monitor the effluent BOD, effluent TSS, effluent pH, effluent flow, effluent priority pollutants, and effluent bioassay of the wastewater system in accordance with their NPDES permit (Permit No. WV0000132). **[45CSR13, R13-1650, 4.2.5; 45CSR34; 40 C.F.R. §§63.143(c) and 63.146(a)]**

4.3. Testing Requirements

- 4.3.1. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak testing provisions include 40 C.F.R. §63.180 (Test methods and procedures.). **[45CSR13, R13-1650, 4.3.1; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.180]**
- 4.3.2. An initial performance test shall be conducted to determine if CO emissions from the Hot Oil Heater [C3T-F-1700] do not exceed the limitation specified in 4.1.6. The performance test for CO shall be conducted according to testing requirements specified in Table 4.3.2.

Table 4.3.2. Carbon Monoxide (CO) Performance Testing Requirements.

Step	Reference to be Followed
a. Select the sampling ports location and the number of traverse points.	Carbon Monoxide Method 1 in appendix A to 40 C.F.R. 60.
b. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to 40 C.F.R. 60, or ASTM D6522–00 (IBR, see 40 C.F.R. §63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see 40 C.F.R. §63.14(i)).
c. Measure the moisture content of the stack gas.	Method 4 in appendix A to 40 C.F.R. 60.
d. Measure the carbon monoxide emission concentration.	Method 10, 10A, or 10B in appendix A to 40 C.F.R. 60, or ASTM D6522–00 (IBR, see 40 C.F.R. §63.14(b)) when the fuel is natural gas.

[45CSR13, R13-1650, 4.3.2]

- 4.3.3. Following the initial performance test, annual performance tests shall be conducted to determine if CO emissions from the Hot Oil Heater [C3T-F-1700] do not exceed the limitation specified in 4.1.6. The annual performance test for CO shall be conducted according to testing requirements specified in Table 4.3.2. Each annual performance test must be conducted between 10 and 12 months after the previous performance test. **[45CSR13, R13-1650, 4.3.3]**
- 4.3.4. The permittee shall conduct performance tests for CO according to 40 C.F.R. §63.7(c),(d),(f), and (h). **[45CSR13, R13-1650, 4.3.4; 40 C.F.R. §§63.7(c), (d), (f), and (h)]**
- 4.3.5. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 4.1.11. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his

option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained. (3P-1600, 4P-1600, 2P-9001, 3P-1700, and U-B-2010) [45CSR§2-8.1.b and 8.1.b.1]

- 4.3.6. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate air pollution emissions other than those noted in 4.1.11. [45CSR§2-8.1.c]
- 4.3.7. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. [45CSR13, R13-1650, 4.1.13; 45CSR§7-8.1]
- 4.3.8. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. [45CSR13, R13-1650, 4.1.13; 45CSR§7-8.2]

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. [45CSR13, R13-1650, 4.4.2]
- 4.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.

- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction

[45CSR13, R13-1650, 4.4.3]

- 4.4.3. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.1 of this permit (monitoring of the daily average hourly and total annual production rates for each of the process units) the permittee shall maintain monthly records of the production rates for each of the units identified in Table 4.1.1 of this permit. **[45CSR13, R13-1650, 4.4.4]**
- 4.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.2 of this permit (monitoring of the hourly and annual fuel consumption rates), the permittee shall maintain monthly records of the fuel consumption rates for each of the Hot Oil Heaters [C2T-B-9001, C3T-B-1600, C4T-B-1600, and C3T-F-1700] the Small Boilers [UGS-B-2010, UGS-B-4010, UGS-B-4011, UGS-B-3010, and UGS-B-3011], and the Space Heaters [UGS-B-1050, UGS-B-1060, UGS-B-1004, UGS-B-1005, UGS-B-1006, UGS-B-1007, UGS-B-4001, UGS-B-4002, UGS-B-4003, UGS-B-4004]. These records shall include, but not limited to, the fuel type(s) and the associated daily average hourly and annual consumption rate during equipment start-up and routine operation. **[45CSR13, R13-1650, 4.4.5; 45CSR§13-15.1.c and 45CSR§34-3.2 for UGS-B-2010]**
- 4.4.5. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.3 of this permit, the permittee shall maintain monthly records of the pressure differential readings across the dust collection systems. **[45CSR13, R13-1650, 4.4.6]**
- 4.4.6. Continuous process vents using a control or recovery device to comply with 4.1.19 shall comply with all applicable recordkeeping provisions specified for continuous process vents in 40 C.F.R. §§63.117 and 63.118 except for the differences noted in 40 C.F.R. §63.1315(a). The pertinent sections of 40 C.F.R. §§63.117 and 63.118 applicable to continuous process vents include the following:
 - a. The permittee shall keep up-to-date and readily accessible hourly records of whether the flow indicator specified under 4.2.4 [40 C.F.R. §63.114(d)(1)] was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating.
 - b. For a boiler or process heater, a description of the location at which the vent stream is introduced into the boiler or process heater shall be recorded.**[45CSR13, R13-1650, 4.4.7.1.1 and 4.4.7.1.2; 45CSR34; 40 C.F.R. §§63.1319(a), 63.1315(a), 63.117(a)(4)(i), 63.117(a)(4)(iii), and 63.118(a)(3)]**
- 4.4.7. Owners or operators required to keep continuous records in accordance with 40 C.F.R. 63, Subpart JJJ shall keep records as specified in 40 C.F.R. §§63.1335(d)(1) through (d)(7). **[45CSR13, R13-1650, 4.4.7.2; 45CSR34; 40 C.F.R. §§63.1315(d), (d)(1) through (d)(7), 63.1335(d)(1) through (d)(7)]**
- 4.4.8. The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 C.F.R. 63, Subpart A as specified in Table 1 of 40 C.F.R. 63, Subpart JJJ. These requirements include the requirements specified in 40 C.F.R. §63.1335(b)(1). **[45CSR13, R13-1650, 4.4.7.3; 45CSR34; 40 C.F.R. §§63.1335(b) and (b)(1)]**
- 4.4.9. The permittee shall maintain records of the NPDES permit (Permit No. WV0000132) parameters monitored in 4.2.5. **[45CSR34; 40 C.F.R. §63.147(b)(4)]**

- 4.4.10. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak recordkeeping provisions include 40 C.F.R. §63.181 (Recordkeeping requirements.). **[45CSR13, R13-1650, 4.4.7.4; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.181]**
- 4.4.11. Copies of all applicable records and reports required by 40 C.F.R. 63, Subpart JJJ shall be kept for at least 5 years, as specified in 40 C.F.R. §63.1335(a)(1), with the exception listed in 40 C.F.R. §63.1335(a)(2). **[45CSR34; 40 C.F.R. §§63.1335(a)(1), and 63.1335(a)(2)]**
- 4.4.12. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in Hot Oil Heaters C3T-B-1600, C4T-B-1600, C3T-F-1700; and Boiler UGS-B-2010. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form. **[45CSR§§2-8.3.c and 8.3.d; 45CSR§2A-7.1.a; 45CSR16; 40 C.F.R. §60.48c(g)(2)]**
- 4.4.13. The permittee shall maintain records of the operating schedule and the quantity and quality of fuel consumed in Hot Oil Heater C2T-B-9001. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. Where appropriate the owner or operator of a fuel burning unit(s) may maintain such records in electronic form. **[45CSR§§2-8.3.c and 8.3.d; 45CSR§2A-7.1.a]**
- 4.4.14. The permittee shall keep readily accessible records for the CP4 EG Storage Tank (C4L-F-1800) showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. **[45CSR13, R13-1650, 4.1.16 and 4.4.8; 45CSR16; 40 C.F.R. §§60.110b(a), 60.116b(a), and 60.116b(b)]**
- 4.4.15. The permittee shall monitor all fugitive particulate emission sources as required by 4.1.16 to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site for a period of no less than five (5) years stating the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems. **[45CSR§30-5.1.c.]**
- 4.4.16. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by 4.1.17 applied at the facility. These records shall be maintained on site for a period of no less than five (5) years. **[45CSR§30-5.1.c.]**
- 4.4.17. The permittee shall comply with the following recordkeeping requirements of 40 C.F.R. 63, Subpart ZZZZ – “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” for Generators P-66 and U3F-G-171 by no later than May 3, 2013.
- a) You must keep the records required in Table 6 of 40 C.F.R. 63, Subpart ZZZZ to show continuous compliance with each operating limitation that applies to you.
 - b) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

- c) You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of the demand response.
- d) Records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).
- e) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- f) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 C.F.R. §63.10(b)(1).

[45CSR34; 40 C.F.R. §§63.6655(d), (e), and (f) and 63.6660(a), (b), and (c)]

4.5. Reporting Requirements

- 4.5.1. In addition to the reports and notifications required by 40 C.F.R. 63, Subpart A as specified in Table 1 of 40 C.F.R. 63, Subpart JJJ, the owner or operator of an affected source shall prepare and submit periodic reports as specified in 40 C.F.R. §63.1335(e)(6). All reports required by this subpart, and the schedule for their submittal, are listed in Table 9 of 40 C.F.R. 63, Subpart JJJ. All reports shall be sent to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media. **[45CSR13, R13-1650, 4.5.1.1; 45CSR34; 40 C.F.R. §§63.1335(e), (e)(2), (e)(6)]**
- 4.5.2. The permittee shall submit as part of the next Periodic Report required by 40 C.F.R. §63.1335(e)(6) the information specified in 40 C.F.R. §§63.146(d)(1) and (3) for process wastewater. **[45CSR13, R13-1650, 4.5.1.2; 45CSR34; 40 C.F.R. §§63.146(d), (d)(1) and (d)(3)]**
- 4.5.3. The permittee shall comply with the requirements of 40 C.F.R. 63, Subpart H for equipment leaks, with the differences noted in 40 C.F.R. §§63.1331(a)(1) through (a)(13). The pertinent equipment leak reporting provisions include 40 C.F.R. §63.182 (Reporting requirements.). **[45CSR13, R13-1650, 4.5.1.3; 45CSR34; 40 C.F.R. §§63.1331(a) and 63.182]**
- 4.5.4. If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in 40 C.F.R. 63, Subpart FFFF must be conducted within 150 days after the switch occurs. **[45CSR13, R13-1650, 4.1.17; 45CSR34; 40 C.F.R. §63.2445(d)]**

4.5.5. Notification of process change.

- a. Except as specified in paragraph 4.5.5.b, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all the information in 4.5.5.a.1 through 4.5.5.a.3.
 - (1) A description of the process change.
 - (2) Revisions to any of the information reported in the original notification of compliance status report under 40 C.F.R. §63.2520(d).
 - (3) Information required by the notification of compliance status report under 40 C.F.R. §63.2520(d) for changes involving the addition of processes or equipment at the affected source.
- b. You must submit a report 60 days before the scheduled implementation date of any of the changes identified in 4.5.5.b.1, 4.5.5.b.2, or 4.5.5.b.3.
 - (1) Any change to the information contained in the precompliance report.
 - (2) A change in the status of a control device from small to large.
 - (3) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in 40 C.F.R. §63.2460(b)(6)(i).

[45CSR13, R13-1650, 4.1.17; 45CSR34; 40 C.F.R. §63.2520(e)(10)]

4.6. Compliance Plan

- 4.6.1. None